

**WAC 296-104-001 Administration--To what do these rules apply?** The following rules and regulations apply to all boilers and unfired pressure vessels except those exempt under RCW 70.79.080. Boilers and unfired pressure vessels listed under RCW 70.79.090 are exempt from inspection and fees, but shall comply with all rules for construction, installation, repairs and general requirements.

## **No Changes recommended for WAC 296-104-001**

**WAC 296-104-100 Inspection -- How often must boilers and unfired pressure vessels be inspected?** In accordance with RCW 70.79.080, 70.79.090, and 70.79.240 the following inspection requirements shall apply:

(1) **Power boilers** shall be inspected:

- (a) Internally and externally while not under pressure - Annually.
- (b) Externally while under pressure - Annually.

(2) **Organic vapor boilers** shall be inspected:

- (a) Internally and externally while not under pressure - Biennially.
- (b) Externally while under pressure - Annually.

(3) **Low pressure heating boilers** shall be inspected:

- (a) Externally while in operation and under pressure - Biennially.
- (b) Where construction permits, internally while not under pressure. Also, as a minimum, an internal of their low water fuel cutoff(s) must be completed, where construction permits - Biennially.

(4) **Hot water heaters** shall be inspected:

- (a) Externally - Biennially.
- (b) Internally - None required.

(5) **Unfired pressure vessels** shall be inspected:

- (a) Externally - Biennially.
- (b) Internally:
  - (i) When subject to corrosion and construction permits - Biennially. Vessels in an owner/user inspection program may follow intervals established by the NBIC or API-510 eighth edition with ~~supplements~~ addenda, provided nondestructive examination (NDE) is performed at the biennial external inspection.
  - (ii) Pulp or paper dryer rolls may be inspected on a five-year basis in accordance with TAPPI TIP 0402-16 ~~1999~~ 2001 edition, provided the owner has established a written inspection program accepted by the inspector that ~~requires the minimums in section 8~~ meets the minimum requirements of TAPPI TIP 0402-16 ~~1999~~ 2001 edition.
  - (iii) Vessels not subject to corrosion do not require an internal.

## **WAC 296-104-102 Inspection -- What are the standards for in-service inspection?**

Where a conflict exists between the requirements of the standards listed below and this chapter, this chapter shall prevail.

(1) The standard for inspection of nonnuclear boilers, unfired pressure vessels, and safety devices is the National Board Inspection Code (NBIC), 2001 edition, with addenda. This code may be used on or after the date of issue and becomes mandatory twelve months after adoption by the board as specified in RCW 70.79.050(2).

(2) The standard for inspection of historical steam boilers of riveted construction preserved, restored, or maintained for hobby or demonstration use, shall be Appendix "C" of the National Board Inspection Code as referenced in (1).

(3) The standard for inspection of nuclear items is ASME section XI. The applicable ASME Code edition and addenda shall be as specified in the owner in-service inspection program plan.

(4) Where a petroleum or chemical process industry owner/user inspection agency so chooses, the standard for inspection of unfired pressure vessels used by the owner shall be the API-510 Pressure Vessel Inspection Code, eighth edition, with ~~supplements~~ addenda. This code may be used on or after the date of issue.

(5) TAPPI TIP 0402-16, dated ~~1999~~ 2001 may be used for both pulp dryers and paper machine dryers when requested by the owner. When requested by the owner, this document becomes a requirement and not a guideline.

## **WAC 296-104-200 Construction -- What are the standards for new construction?** The standards for new construction are:

(1) ASME Boiler and Pressure Vessel Code, ~~2001~~ 2004 edition, with addenda Sections I, III, IV, VIII, X;

(2) ASME/~~ANSI~~ PVHO-1 (~~Standard for Pressure Vessels for Human Occupancy~~), ~~1997 edition~~ 2002-2003 Safety Standard for Pressure Vessels for Human Occupancy; and

(3) ASME CSD-1 ~~1998~~ 2002 edition with addenda (as referenced in WAC 296-104-300(3)); and

(4) NFPA 85 Boiler and Combustion Systems Hazards Code 2001 edition (for use with boilers with fuel input ratings over 12,500,000 BTU/hr); and

~~(4)~~ (5) Standards of construction approved by the chief inspector and meeting the National Board Criteria for Registration of Boilers, Pressure Vessels and Other Pressure Retaining Items.

These codes and standards may be used on or after the date of issue and become mandatory twelve months after adoption by the board as specified in RCW 70.79.050(2). ASME Code Cases may be approved for use when accepted by the Chief Inspector. The board recognizes that the ASME Code states that new editions of the code become mandatory on issue and that subsequent addenda become mandatory six months after the date of issue. For nuclear systems, components and parts the time period for addenda becoming mandatory is defined in the Code of Federal Regulations.

**WAC 296-104-520 Repairs -- What are the requirements for repair of nonnuclear safety devices?** The resetting, repairing, and restamping of safety valves and relief valves shall be done by a qualified manufacturer or valve repair organization holding a valid "V," "UV," or "VR" Certificate of Authorization issued by the National Board of Boiler and Pressure Vessel Inspectors. Section IV safety valves shall be repaired only by the valve manufacturer.

Boiler and pressure vessel users, however, may authorize external adjustments to be made to bring their installed safety valves and relief valves, except Section IV safety valves, back to the stamped set pressure [when performed by the user's trained, qualified, regular, and full time employee or](#) ~~F~~ this adjustment shall be witnessed and approved by a National Board Commissioned Inspector. [Refer to Appendix "J" of the National Board Inspection Code as referenced in WAC 296-104-102 for guidelines in training and qualifying user employees.](#) All such external adjustments shall be resealed showing the identification of the organization making the adjustments and the date.

Repairing of noncode relief or safety valves shall not be allowed, except as specified below. Noncode liquid relief valves installed prior to 1-1-85 shall be repaired by an organization holding a valid "V," "UV," or "VR" Certificate of Authorization, but need not be stamped.